

benzene, pentaerythrite tri-, and tetra(meth)acrylate, di- and tripropylene glycol di(meth)acrylate, hexandediol di(meth)acrylate and mixtures thereof.

Please replace the paragraph beginning at page 8, line 19 with the following rewritten paragraph:

The clear lacquer coating agents ad/or sealing coating agents used in the process according to the invention can contain thermally activable radical initiators. Examples of thermolabile radical initiators are: organic peroxides, organic azo compounds or C-C splitting initiators, such as dialkyl peroxides, peroxocarboxylic acids, peroxodicarbonates, peroxide esters, hydroperoxides, ketone peroxides, azo dinitriles or benzopinacolsilylether. They are preferably used in quantities of 0.1 to 5 wt. % in relation to the resin solid.

Please replace the paragraph beginning at page 16, line 24, with the following rewritten paragraph:

The resin solutions from examples 1a-e and 1h-l are each thinned with butyl acetate to a solids content of 60 wt. % 97 parts by weight of each solution is mixed with 0.1 parts by weight of a radically polymerisable silicon levelling additive, 1 part by weight of a light protection agent (HALS, hindered amine light stabilizer) 0.5 parts by weight of a UV absorber based on benzo triazol, 1 part by weight of a photo-initiator from the alpha hydroxy ketones group and 0.4 parts by weight of a photo-initiator from the acylphosphine oxides group.

IN THE CLAIMS:

Please CANCEL claims 1-9 without prejudice or disclaimer of the subject matter thereof.

Please ADD the following new claims:

Claim 10. A process for producing a clear lacquer coating in a base lacquer/clear lacquer two-coat lacquering system, comprising the steps of:

- a) applying a base lacquer coating selected from the group consisting of a color-providing base lacquer coating and an effect-providing base lacquer coating to a substrate;

- b) applying the clear lacquer coating onto the base lacquer coating as a top coating, said clear lacquer coating being curable by radical polymerization; and
- c) curing said clear lacquer coating with high-energy radiation;

wherein the clear lacquer coating comprises a resin solid consisting of:

- I. 70 to 100 wt.% of at least one radically polymerizable polymer selected from the group consisting of oligomers and prepolymers, wherein said polymers have at least one olefinically unsaturated group; and
- II. 0 to 30 wt.% of at least one radically polymerizable reactive thinner having olefinically unsaturated groups and having a calculated molar mass of less than 500;

wherein 75 to 100 wt.% of component I is an aliphatic urethane (meth)acrylate having an average (meth)acryloyl functionality of 3 to 4.5 and a calculated molecular mass of at least 826;

wherein said aliphatic urethane (meth)acrylate is formed by reacting an acyclic aliphatic diisocyanate having 8 C atoms with at least one low-molecular aliphatic compound, wherein said low-molecular aliphatic compound has at least one hydroxy group and at least one (meth)acryloyl group, and optionally with at least one low-molecular aliphatic hydroxy reactant selected from the group consisting of diols and polyols; and

wherein 0 to 25 wt.% of component I is a radically polymerizable member selected from the group consisting of polymers and oligomers, wherein said radically polymerizable member contains radically polymerizable double bonds, said radically polymerizable member being different from the aliphatic urethane (meth)acrylate of component I.

Claim 11. The process according to claim 10 wherein the aliphatic urethane (meth)acrylate is formed by reacting polyisocyanates based on acyclic aliphatic diisocyanates having 8 C atoms, wherein the polyisocyanates contain heteroatom groups linking isocyanate groups together in said polyisocyanates, with at least one low-molecular aliphatic compound, wherein said low-molecular aliphatic compound

has at least one hydroxy group and at least one (meth)acryloyl group, and optionally with at least one low-molecular aliphatic hydroxy reactant selected from the group consisting of diols and polyols.

Claim 12. The process according to claim 10 wherein the clear lacquer coating comprises a resin solid consisting of:

- I. 90 to 100 wt.% of at least one radically polymerizable polymer selected from the group consisting of oligomers and prepolymers, wherein said polymers have at least one olefinically unsaturated group; and
- II. 0 to 10 wt.% of at least one radically polymerizable reactive thinner having olefinically unsaturated groups and having a calculated molar mass of less than 500.

Claim 13. A process for producing a transparent sealing coat in a multi-coat lacquer, comprising the steps of:

- (a) applying the transparent sealing coat to an outer lacquer coating of a substrate; and
- (b) curing the transparent sealing coat with high-energy radiation;

wherein the transparent sealing coat comprises a resin solid consisting of:

- I. 70 to 100 wt.% of at least one radically polymerizable polymer selected from the group consisting of oligomers and prepolymers, wherein said polymers have at least one olefinically unsaturated group; and
- II. 0 to 30 wt.% of at least one radically polymerizable reactive thinner having olefinically unsaturated groups and having a calculated molar mass of less than 500;

wherein 75 to 100 wt% of component I is an aliphatic urethane (meth)acrylate having an average (meth)acryloyl functionality of 3 to 4.5 and a calculated molecular mass of at least 826;

wherein said aliphatic urethane (meth)acrylate is formed by reacting an acyclic aliphatic diisocyanate having 8 C atoms with at least one low-molecular aliphatic compound, wherein said low-molecular aliphatic compound has at least one hydroxy group and at least one (meth)acryloyl group, and optionally with at least one low-molecular aliphatic hydroxyl reactant selected from the group consisting of diols and polyols and

wherein 0 to 25 wt.% of component I is a radically polymerizable member selected from the group consisting of polymers and oligomers, wherein said radically polymerizable member contains radically polymerizable double bonds, said radically polymerisable member being different from the aliphatic urethane (meth)acrylate of component I.

Claim 14. The process according to claim 13 wherein the aliphatic urethane (meth)acrylate is formed by reacting polyisocyanates based on acyclic aliphatic diisocyanates having 8 C atoms, wherein the polyisocyanates contain heteroatom groups linking isocyanate groups together in said polyisocyanates, with at least one low-molecular aliphatic compound, wherein said low-molecular aliphatic compound has at least one hydroxy group and at least one (meth)acryloyl group, and optionally with at least one low-molecular aliphatic hydroxyl reactant selected from the group consisting of diols and polyols.

Claim 15. The process according to claim 13 wherein the transparent sealing coat comprises a resin solid consisting of:

- I. 90 to 100 wt.% of at least one radically polymerizable polymer selected from the group consisting of oligomers and prepolymers, wherein said polymers have at least one olefinically unsaturated group; and
- II. 0 to 10 wt.% of at least one radically polymerizable reactive thinner having olefinically unsaturated groups and having a calculated molar mass of less than 500.

Claim 16. The process according to claim 10 or 13, wherein the acyclic aliphatic diisocyanate having 8 C atoms is selected from the group consisting of methyl pentane diisocyanate and hexane diisocyanate.